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Comparative dynamics of integration of climate change issue in policies for agricultural sector in Latin America and Caribe

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Background

- Integration of climate change (CC) issue within national agricultural policy agenda is a necessary step for transformation pathways of agriculture in CC context (Campbell et al, 2018)
- While International influence through international agreements is straightforward, national process of integration of CC issue into agricultural agenda and sectorial national policy diversity is poorly explain yet.

Objective

Compare dynamics of integration of CC issues in policy mix regarding CC adaptation for agriculture in three countries and territories of Latin America (Brazil, Colombia, Honduras) and a French tropical ultramarine territory (Guadeloupe) [**Fig.1].**

Fig. 1: Study area Location

Conceptual background

- Policy process of integration (Adelle & Duncan, 2013; Rayner & Howlett, 2009)
- Policy mix (Flanagan et al,. 2011; Rogge & Reichardt, 2016) related to agriculture adaptation to climate change
- Key explicative factors of integration raised from diverse policy process analytical frameworks : Agenda setting & Policy windows (Kingdon, 1993), Path dependency framework (Mahoney, J. & K. Thelen, 2010); Policy transfer (Dolowitz & March, 2000); Actors' interplay (Hassenteufel, 2011)

Method

- Policy document review ➔ Policy time line
- Direct qualitative interviews to stakeholders
  ➔ Description of policy process leading to CC integration in agricultural policy
- Crossing interviews and document information
  ➔ Identification of the key variables explaining integration of CC issue
  ➔ Characterization of the form of integration and process (pathway of integration)

Results

Different form and process of integration according to the country situation **(Fig.2)**

- **Brazil**
  - CC issue for agriculture integrated in the ABC Plan mainly oriented toward mitigation;
  - The National Adaptation Plan was built on distinct (sometimes competing) concepts of agricultural development.
- **Colombia**
  - Elaboration of multiple new policy document first oriented toward mitigation in line with international agenda, then adaptation and at last mitigation and adaptation integrated under the leadership of a strategic planning organization (DNP)
  - Two concepts emerges to address climate issue: CC and Disaster Risk Management (DRM)
- **Honduras**
  - Elaboration of multiple policy document regarding CC issue following international commitments
  - Multiple document regarding agriculture sector due to competing institutional leadership in management of CC issue
- **Guadeloupe**
  - CC invisibilization at local and sectoral level
  - Adaptation to CC tools are turned into agro environmental transition issues and goals
  - Agricultural sector invisibilizes adaptation to CC in favor to agroecological transition pathways and market competition arguments
- **Some common features**
  - **Facilitating factors:** international agreements, raising awareness in policy spheres
  - **Limiting factors :** Disconnection between Min. of environment and agricultural stakeholders; competing issues or more stringent issues for agriculture, political turn-over …

Fig 2: Key characteristics of the CC issue integration process in agricultural policy in selected countries

Characteristics	Brazil	Colombia	Honduras	Guadeloupe
Main document of CC policy	National Climate Policy [2009] INDC [2015]	CONPES 3700 [2011] National Plan of Adaptation to CC [2011] INDC [2015] National climate policy [2017] CC law [2018]	National climate change strategy (ENCC) [2010] INDC [2015] Climate Agenda [2017] and national adaptation an mitigation plans [2018]	Adaptation to climate change National plan (France) [2011]
Main document of Agriculture related CC policy	Low-Carbon Agriculture (ABC Plan) [2012] Sectoral Strategies of the National Adaptation Plan (NAP) [2016]	Sectoral actions plan for mitigation of GHGs for the agricultural sector [2014] Adaptation strategy of the agricultural sector to climatic phenomena [2014] Integrated CC management plan (PIGCC)	National strategy for adaptation to CC for Agrofood sector [2014] National risk management plan for Agrofood sector [2016] Water, forest and soil plan (ABS) [2017] Institutional plan for adaptation to CC in Agrofood sector [2019]	European Union Common Agricultural Policy (CAP) & Agro-environmental climatic measures (AECM) Regional Rural Development Plan
Main factors influencing of CC integration in policy agenda	International agreements, Climate events [2011], Access to international markets	Nina event [2010/2011] International agreements and cooperation resources	International agreements and cooperation resources ; Repeated extreme climatic events (droughts and flooding)	National (French) and European policy demand (top-down process)
Main actors of the policy design	Ministries of Environment and Agriculture	National Planning Department (DNP) and Ministry of Environment	CC unit of Min. environ.; CC office of SAG, presidential office on climate (CLIMA +)	Region + State agencies + sectors (bananas, vegetable gardening)
Form and process of integration (regarding agricultural issue related to CC)	Integration by aggregation of existing policies (NAP), Some innovations in ABC Plan (credit to low-carbon technology)	Incremental integration top-down centralized process Creation of new policy instruments but few implementation Influence from international level	Multipolar integration Several policy documents issued by different administrative bodies Influence of international level and donors	Very limited integration of CC in agricultural policy agenda (invisibility)
Favorable factor for CC integration	Raising awareness, international markets, international cooperation support	International cooperation support, Strong leadership in the topic (DNP) Low involvement of local actors	International cooperation support, Raising awareness of stringent climate risks	Rise of see level, Frequency of hurricanes, Water supply shortage
Limiting factors of integration in policy formulation	Mainstreaming approach not able to influence sectoral agendas; Insufficient knowledge on climate vulnerabilities; low participation of local/regional actors	Other preexisting and more salient issue (peace agreement agenda) Two competing concepts : CC vs DRM	Competing bureaucratic organizations for leadership in CC Discrepancy of interest and vision between agricultural and environmental sectors	Other preexisting and more salient issues in agriculture agenda (agricultural soil pollution, pests and diseases, employment)
Limiting factors of integration in policy implementation	Political turn-over & increasing tension with agricultural interests (as a pillar of Brazilian economy); Lack of financial resources from government; Political conflicts, operational bottlenecks & low interaction of actors with the same agenda	Political turn-over Lack of financial resources from government / dependency from cooperation resources Lack of vertical coordination between national and local level Low involvement of farmers' organization	Political turn-over Lack of financial resources from government Dependency from international cooperation resources	Low political will Lack of specific knowledge on climate risk in agriculture

Source: authors

Conclusion & Perspectives

- Four types of pathways for CC issue integration in agricultural sector: limited integration (invisibilization), incremental top-down integration, multipolar integration, and integration by aggregation
- Those pathways and patterns of integration can be explain by pre-existing salient problems, institutional layouts and relative power of bureaucratic organizations and actors' interplays.
- Further research needed to analyze the bottlenecks in policy mix implementation, including coordination issue among policy implementers, the role of science and scientific research in the implementation process and strengthening institutional capacity in management of CC issue.

References

- Adelle C. and Duncan R (2013). Climate Policy Integration: A Case of Déjà Vu?" Environmental Policy and Governance 23, no. 1: 1–12.
- Campbell, B. M., J. Hansen, J. Rioux, C. M. Stirling, S. Twomlow and E. Wollenberg (2018). "rgent action to combat climate change and its impacts (SDG 13): transforming agriculture and food systems." Current Opinion in Environmental Sustainability 34: 13-20.
- DolowitzD. P. & D. Marsh (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. Governance 13(1): 5-23.
- Flanagan, K., E. Uyarra and M. Laranja (2011). "Reconceptualising the 'policy mix' for innovation." Research Policy 40(5): 702-713.
- Hassenteufel, P. (2011). Sociologie politique: l'action publique. Paris, Armand Colin.
- Kingdon, J. W. (1993). How do issues get on public policy agendas. Sociology and the Public Policy Agenda. Newbury Park, Sage: 40-50.
- Jordan A. & A. Lenschow. (2010) Environmental Policy Integration: A State of the Art Review. Environmental Policy and Governance 20, no. 3 : 147–158.
- Mahoney, J. & K. Thelen (2010). A theory of gradual institutional change. Explaining institutional change: Ambiguity, agency, and power 1. Cambridge University Press
- Rayner J. & M. Howlett (2009) Introduction: Understanding integrated policy strategies and their evolution. Policy and Society 28(2): 99-109.
- Rogge, K. S. & K. Reichardt (2016). "Policy mixes for sustainability transitions: An extended concept and framework for analysis." Research Policy 45(8): 1620-1635.

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